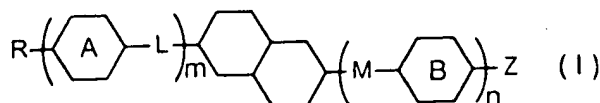


# IN THE CLAIMS

Please amend claims 1, 14 and 16 as follows:

1. (Currently amended) A compound represented by general formula (I) :



(wherein, R and Z may be substituted with a halogen and represent alkyl groups or alkoxy groups having 1-16 carbon atoms, alkenyl groups having 2-16 carbon atoms, alkenyloxy groups having 3-16 carbon atoms, alkyl groups having 1-12 carbon atoms substituted with an alkoxy group having 1-10 carbon atoms, hydrogen atoms, fluorine atoms, chlorine atoms, trifluoromethoxy groups, difluoromethoxy groups, trifluoromethyl groups, 2,2,2-trifluoroethoxy groups, cyano groups, cyanato groups, hydroxy groups or carboxy groups, m and n may be the same or different and respectively and independently represent an integer of 0-2,  $1 \leq m+n \leq 3$ , L and M may be the same or different and respectively and independently represent  $-CH_2CH_2-$ ,  $-CH(CH_3)CH_2-$ ,  $-CH_2CH(CH_3)-$ ,  $-CH_2O-$ ,  $-OCH_2-$ ,  $-CF_2O-$ ,  $-OCF_2-$ ,  $-COO-$ ,  $-OCO-$ ,  $-CH=CH-$ ,  $-CF=CF-$ ,  $-C \equiv C-$ ,  $-O(CH_2)_3-$ ,  $-(CH_2)_3O-$ ,  $-(CH_2)_4-$  or a single bond, rings A and B when present may be the same or different and respectively and independently represent a trans-1,4-cyclohexylene group in which one  $CH_2$  group or more than one non-adjacent  $CH_2$  groups in the group may be replaced by -O- or -S-, a 1,4-phenylene group in which one  $CH_2$  group or more than one non-adjacent  $CH_2$  groups in the group may be replaced by -N=, a 1,4-cyclohexenylene group, 1,4-bicyclo(2,2,2)octylene group, piperidine-1,4-diyl group, naphthalene-2,6-diyl

group, trans-decahydronaphthalene-trans-2,6-diyl group or 1,2,3,4-tetrahydronaphthalene-2,6-diyl group, and although these may be substituted with a cyano group or halogen, in the case m or n represents 2, at least one of the two L or M present represents a single bond; provided that the following cases are excluded:

- i. case in which either m or n represents 1, the other of m or n represents 0, ring A or ring B when present represents a 1,4-cyclohexylene group, L or M when present represents a single bond, R or Z bonded to a decahydronaphthalene ring represents a non-substituted alkyl group, and R or Z bonded to a 1,4-cyclohexylene group represents a non-substituted alkyl group, alkoxy group or alkenyloxy group;
- ii. case in which either m or n represents 1, the other m or n represents 0, ring A or ring B when present represents a 1,4-cyclohexylene group, L when present represents -OCO- or M when present represents -COO-, ~~R or Z bonded to a decahydronaphthalene ring represents a non-substituted alkyl group,~~ and R or Z bonded to a 1,4-cyclohexylene group represents a non-substituted alkyl group or cyano group;
- iii. case in which either m or n represents 1, the other m or n represents 0, ring A or ring B when present represents a non-substituted 1,4-phenylene group, L when present represents -OCO- or M when present represents -COO-, ~~L or M when present represents a single bond, R or Z bonded to a decahydronaphthalene ring represents an alkyl group,~~ and R or Z bonded to a 1,4-phenylene group represents a non-substituted alkyl group, alkoxy group, hydroxyl group, hydrogen atom, carboxyl group or cyano group;
- iv. case in which either m or n represents 1, the other m or n represents 0, ring A or ring B when present represent a non-substituted 1,4-phenylene group, L or M when present represents a single bond, R or Z bonded to a decahydronaphthalene ring represents a non-substituted alkoxy group, and R or Z bonded to a 1,4-

phenylene group represents a non-substituted alkyl group;

v. case in which either m or n represents 1, the other m or n represents 0, ring A or ring B when present represents a trans-decahydronaphthalene-trans-2,6-diyl group, L when present represents -OCO-, M when present represents -COO- or L or M when present represent a single bond, and R and Z represent non-substituted alkoxy groups;

vi. case in which either m or n represents 1, the other m or n represents 0, ring A or ring B when present represents a non-substituted naphthalene-2,6-diyl group, L when present represents -OCO- or M when present represents -COO-, R or Z bonded to a decahydronaphthalene ring represents a non-substituted alkyl group, and R or Z bonded to a naphthalene-2,6-diyl group represents a non-substituted alkyl group, bromine atom or cyano group, or the case in which R or Z bonded to a decahydronaphthalene ring represents a non-substituted alkoxy group, and R or Z bonded to a naphthalene-2,6-diyl group represents a non-substituted alkyl group or cyano group;

vii. case in which n represents 2, m represents 0, R represents a non-substituted alkyl group, M when present adjacent to a decahydronaphthalene ring represents -COO-, at least one of rings B present represents a non-substituted 1,4-phenylene group, and Z represents a non-substituted alkyl group or bromine atom, or the case in which at least one of rings B present represents a pyrimidine-2,5-diyl group, and Z represents a non-substituted alkyl group, alkoxy group or cyano group; and

viii. case in which m and n represent 1, ring A represents a trans-decahydronaphthalene-trans-2,6-diyl group or a 1,4-cyclohexylene group, ring B represents a non-substituted 1,4-phenylene group or 1,4-cyclohexylene group, L represents a single bond, M represents -COO-, -OCO-, -CH<sub>2</sub>O- or -OCH<sub>2</sub>-, and R and Z represent

non-substituted alkyl groups.

2. (Original): A compound according to claim 1 wherein, ring A and ring B when present respectively and independently represent a 1,4-phenylene group, naphthalene-2,6-diyl group, 1,2,3,4-tetrahydronaphthalene-2,6-diyl group, trans-1,4-cyclohexylene group or decahydronaphthalene-2,6-diyl group that may be substituted with fluorine atom(s).

3. (Original): A compound according to claim 1 wherein, ring A or ring B when present respectively and independently represent a 1,4-phenylene group or trans-1,4-cyclohexylene group that may be substituted with fluorine atom(s).

4. (Original): A compound according to claim 1 wherein, L and M when present represent  $-\text{CH}_2\text{CH}_2-$ ,  $-\text{CH}_2\text{O}-$ ,  $-\text{OCH}_2-$ ,  $-\text{CF}_2\text{O}-$ ,  $-\text{OCF}_2-$ ,  $-\text{COO}-$ ,  $-\text{OCO}-$ ,  $-\text{CF}=\text{CF}-$  or a single bond.

5. (Original): A compound according to claim 1 wherein, L or M represents a single bond.

6. (Original): A compound according to claim 1 wherein, L and M represent single bonds.

7. (Original): A compound according to claim 1 wherein,  $1 \leq m + n \leq 2$ .

8. (Original): A compound according to claim 1 wherein, R represents an alkyl group, alkoxy group, alkenyl group or alkenyloxy group having 1-12 carbon atoms.

9. (Original): A compound according to claim 1 wherein, Z represents a halogen atom or an alkyl group, alkoxy group, alkenyl group, alkenyloxy group or cyano group having 1-12 carbon atoms.

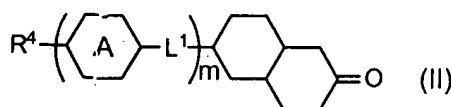
10. (Previously presented): A compound according to claim 1 wherein, R represents an alkyl group or alkenyl group having 1-12 carbon atoms, m represents 1, n represents 1, ring A represents a trans-1,4-cyclohexylene group, ring B represents a 3-fluoro-1,4-phenylene group or 3,5-difluoro-1,4-phenylene group, L and M represent single bonds, and Z represents a fluorine atom, chlorine atom, trifluoromethoxy group, difluoromethoxy group, trifluoromethyl group, 2,2,2-trifluoroethoxy group or cyano group.

11. (Previously presented): A compound according to claim 1 wherein, R represents an alkyl group or alkenyl group having 1-12 carbon atoms, m represents 0, n represents 1, ring B represents a 3-fluoro-1,4-phenylene group or 3,5-difluoro-1,4-phenylene group, M represents a single bond and Z represents a fluorine atom, chlorine atom, trifluoromethoxy group, difluoromethoxy group, trifluoromethyl group, 2,2,2-trifluoroethoxy group or cyano group.

12. (Original): A compound according to claim 1 wherein, R and Z represent alkyl groups or alkenyl groups having 1-12 carbon atoms, m and n represent 1, rings A and B represent 1,4-phenylene groups or trans-1,4-cyclohexylene groups, and L and M represent single bonds.

13. (Original): A compound according to claim 1 wherein, R and Z represent alkyl groups or alkenyl groups having 1-12 carbon atoms, at least one of R or Z represents an alkenyl group, m represents 1, n represents 0, rings A and B represent 1,4-phenylene groups or trans-1,4-cyclohexylene groups, and L represents a single bond.

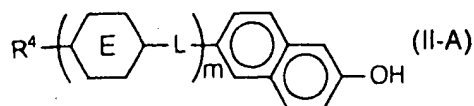
14. (Currently amended): A compound represented by general formula (II):



(wherein, R<sup>4</sup> represents an alkyl group, alkoxy group, alkenyl group, alkenyloxy group or alkoxyalkyl group, L<sup>1</sup> represents -CH<sub>2</sub>CH<sub>2</sub>-, -CH(CH<sub>3</sub>)CH<sub>2</sub>-, CH<sub>2</sub>CH(CH<sub>3</sub>)-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -COO-, -OCO-, -CH=CH-, -CF=CF-, -C≡C-, -O(CH<sub>2</sub>)<sub>3</sub>-, -(CH<sub>2</sub>)<sub>3</sub>O-, -(CH<sub>2</sub>)<sub>4</sub>-, or a single bond, R<sup>4</sup> represents an alkenyl group, alkenyloxy group or alkoxyalkyl group when L<sup>1</sup> represents a single bond, ring A represents a trans-1,4-cyclohexylene group in which one CH<sub>2</sub> group or more than one non-adjacent CH<sub>2</sub> groups in the group may be replaced by -O- or -S-, a 1,4-phenylene group in which one CH<sub>2</sub> group or more than one non-adjacent CH<sub>2</sub> groups in the group may be replaced by -N=, a 1,4-cyclohexenylene group, 1,4-bicyclo(2,2,2)octylene group,

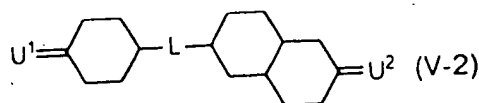
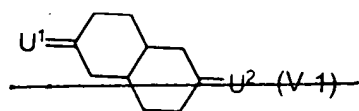
piperidine-1,4-diyl group, naphthalene-2, 6-diyl group, trans-decahydronaphthalene-trans-2,6-diyl group or 1,2,3,4-tetrahydronaphthalene-2, 6-diyl group, m represents an integer of  $\theta=2$  1 or 2, and the decahydronaphthalene ring has a trans form).

15. (Previously presented): A production method of general formula (II) according to claim 14 including: reducing a compound represented by general formula (II-A):

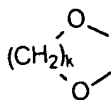


(wherein,  $R^4$  is the same as previously defined in general formula (II), ring E represents a 1,4-phenyl group or trans-1,4-cyclohexylene group, L is the same as  $L^1$  defined in general formula (II), and m is the same as previously defined in general formula (II), and the decahydronaphthalene ring has a trans form), and oxidizing the hydroxyl group as necessary.

16. (Currently amended): A compound represented by general formula (V-1) or general formula (V-2):

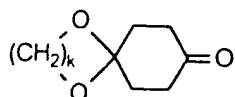


(wherein,  $U^1$  and  $U^2$  respectively and independently represent an oxygen atom or the following structure:

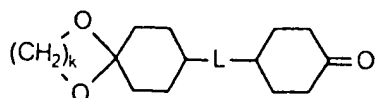


(wherein, k represents an integer from 1 to 7), L represents  $-\text{CH}_2\text{CH}_2-$ ,  $-\text{CH}(\text{CH}_3)\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}(\text{CH}_3)-$ ,  $-\text{CH}_2\text{O}-$ ,  $-\text{OCH}_2-$ ,  $-\text{CF}_2\text{O}-$ ,  $-\text{OCF}_2-$ ,  $-\text{COO}-$ ,  $-\text{OCO}-$ ,  $-\text{CH}=\text{CH}-$ ,  $-\text{CF}=\text{CF}-$ ,  $-\text{C}\equiv\text{C}-$ ,  $-\text{O}(\text{CH}_2)_3-$ ,  $-(\text{CH}_2)_3\text{O}-$ ,  $-(\text{CH}_2)_4-$  or a single bond, and the decahydronaphthalene ring has a trans form).

17. (Previously presented): A production method of general formula (V-2) or general formula (V-1) according to claim 16,  
 including: converting a compound represented by general formula (V-1A) or general formula (V-2A):



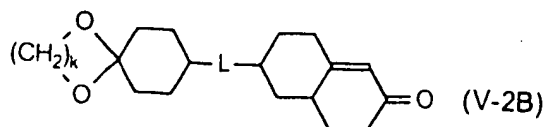
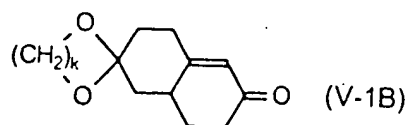
(V-1A)



(V-2A)

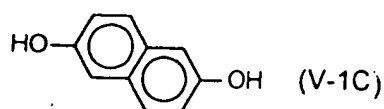
(wherein, k and L are the same as previously defined in claim 16) into an enamine using a secondary amine, and reacting it with methyl vinyl ketone to obtain a compound represented by general formula (V-1B) or general formula (V-2B)





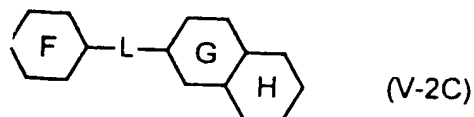
(wherein, k and L are is the same as previously defined in claim 16) followed by reductive hydrogenation.

18. (Previously presented): A production method of general formula (V-1) according to claim 17 including: reducing a compound represented by formula (V-1C) by hydrogen in the presence of metal catalyst:

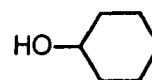
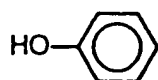
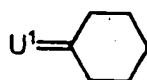


oxidizing the hydroxyl groups as necessary, and protecting the carbonyl groups as necessary.

19. (Original): A production method of general formula (V-2) according to claim 16 including: reducing a compound represented by general formula (V-2C):

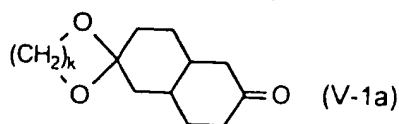


(wherein, although ring G represents a cyclohexane ring or benzene ring, a single bond(s) of the cyclohexane ring may be replaced by double bond(s), and although rings F and H respectively and independently represent the following structures:

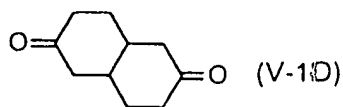


(wherein,  $U^1$  is the same as previously defined in general formula (V-1) or general formula (V-2)), a single bond(s) of the cyclohexane ring may be replaced by double bond(s), oxidizing the hydroxyl group as necessary, and further protecting the carbonyl group as necessary.

20. (Previously presented): A production method of general formula (V-1a):



(wherein k represents an integer from 1 to 7) including monoacetalation of a compound represented by general formula (V-1D):



21. (Previously presented): A liquid crystal composition containing a compound according to claim 1.

22. (Previously presented): A liquid crystal device having for its constituent feature the liquid crystal composition according to claim 21.

23. (Previously presented): An active matrix drive, liquid crystal device that uses the liquid crystal composition according to claim 21.

U.S. Patent Application Serial No. **09/763,531**

Amendment dated February 27, 2004

Reply to OA of **September 29, 2003**

24. (Previously presented): A super twisted nematic liquid crystal device that uses the liquid crystal composition according to claim 21.